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10/752,258

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Andreas Hund

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11/07/2006

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EXAMINER

CONSILVIO, MARK J

ART UNIT

PAPER NUMBER

2872

DATE MAILED: 11/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/752,258

Applicant(s)

HUND ET AL.

Examiner

Mark Consilvio

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 October 2006.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-23 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/17/2006 has been entered.

### *Status of Claims*

Claims 1-23 were previously rejected and claims 1, 6, 9, 20, and 21 are newly amended. Claims 1-23 are currently pending.

### *Claim Objections*

Claim 1 is objected to because of the following informalities: Claim 1 should be corrected so as to be in proper grammatical form. The examiner recommends the addition of a common <sup>it</sup> between “interface, and” and “downstream” in line 8 and deletion of the comma after “operator interface” in line 10.

Appropriate correction is required.

*Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 9-13, 19, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Muchel (US Patent No. 4,691,997).

With respect to claim 1, Muchel discloses a tube (3) for a microscope, comprising: an adaptation interface (between elements 2 and 4); a rotatably disposed operator interface (5); a beam-deflecting device (7, 13, 15) including a beam-splitting device (13); and a rotatably disposed beam deflecting unit (8), a rotation of the operator interface (5) being constrainedly coupled to a rotation of the beam-deflecting unit (8); wherein the beam-deflecting device (7, 13, 15) is configured to split, into at least a first partial beam and a second partial beam, a light beam coming from the adaptation interface, and, downstream of the splitting, to deflect, the first partial beam away from the operator interface (via mirror 15) and the second partial beam in a direction of the beam-deflecting unit (8) and away from the operator interface (5) (via mirror 7) (fig. 1).

With respect to claim 9, Muchel discloses optical properties of the beam-deflecting device (13) are selectable so that a length of a respective optical path of at least one of the first and second partial beams in the tube is adaptable (col. 3, lines 35-53).

With respect to claim 10, Muchel discloses at least a portion of the beam splitter device is movable into and out of a working position (col. 3, lines 35-53).

With respect to claim 11, Muchel discloses at least a portion of the beam splitter device is movable into and out of a working position by a magazine slider (col. 3, lines 35-53).

With respect to claim 12, Muchel discloses the operator interface (5) and the beam-deflecting unit (8) are rotatable about a rotation axis (9), the rotation axis (9) being perpendicular to an optical axis of the light beam (fig. 1).

With respect to claim 13, Muchel discloses, upon a rotation of the operator interface (5) through a first angle, the beam-deflecting unit (8) is configured to rotate through a second angle half as large as the first angle (col. 3, lines 8-19).

With respect to claim 19, Muchel discloses the operator interface (5) includes a binocular element configured for eyepiece viewing by an operator (fig. 1).

With respect to claim 20, Muchel discloses the beam-splitting device (13) is configured to split-off the first partial beam to a detector (6) (fig. 1).

Claims 1-4 and 20-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Schmidt et al. (US Patent Application Publication No. 2003/0133187) (herein Schmidt).

With respect to claim 1, Schmidt discloses a tube for a microscope, comprising: an adaptation interface (1); a rotatably disposed operator interface (15); a beam-deflecting device (i.e. 3, 9, 21-23, etc) including a beam-splitting device (21-23); and a rotatably disposed beam-deflecting unit (not shown), a rotation of the operator interface being constrainedly coupled to a rotation of the beam-deflecting unit (par. 29); wherein the beam-deflecting device is configured

Art Unit: 2872

to split, into at least a first partial beam and a second partial beam, a light beam coming from the adaptation interface, and, downstream of the splitting, to deflect, the first partial beam away from the operator interface and the second partial beam in a direction of the beam-deflecting unit and away from the operator interface (figs. 1-3).

With respect to claim 2, Schmidt discloses the beam-deflecting device includes a deflecting prism (9) (fig. 1).

With respect to claim 3, Schmidt discloses the deflecting prism (9) is configured to deflect by 90 degrees the light beam coming from the adaptation interface (fig. 1).

With respect to claim 4, Schmidt discloses the beam-splitting device (21-23) includes a Bauernfeind prism (21) configured to reflect therein twice the light beam coming from the adaptation interface (fig. 2).

With respect to claim 20, Schmidt discloses the beam-splitting device (21-23) is configured to split-off the first partial beam to a detector (17) (fig. 1).

With respect to claim 21, Schmidt discloses the beam-splitting device (21-23) includes a Bauernfeind prism configured to reflect therein twice the second partial beam, and includes an optical component (23) associated with a Bauernfeind prism (21), the optical component being configured to split-off the first partial beam to a detector (17) (fig. 1).

With respect to claim 22, Schmidt discloses the optical component (23) includes a prism attached to the Bauernfeind prism (21) (par. 23).

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5-8 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt et al. (US Patent Application Publication No. 2003/0133187).

With respect to claim 5, Schmidt discloses all the limitations of claims 1 and 4 as stated supra. Schmidt further discloses a beam splitter (3) is configured to deflect by 90 degrees the light beam coming from an adaptation interface (1) and wherein the Baurnefeind prism (21) is disposed between the beam splitter (3) and beam-deflecting unit (i.e. 3, 9, 21-23, etc). Schmidt does not expressly disclose that the beam splitter is a deflecting prism. However, deflecting prisms are a well-known embodiment of beam splitters (e.g. US Patent No. 5,847,866). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use a deflecting prism as the beam splitter of Schmidt. One of ordinary skill in the art would have been motivated to do this to make use of pre-made or pre-assembled beam splitters.

With respect to claim 6, Schmidt discloses the beam-splitting device (21-23) includes an optical component (23) associated with a Bauernfeind prism (21), the optical component being configured to split the light beam coming from the adaptation interface into the first and second partial beams (fig. 1).

With respect to claim 7, Schmidt discloses the optical component (23) includes a prism attached to the Bauernfeind prism (21) (par. 23).

With respect to claims 8 and 23, Schmidt does not expressly disclose the prism is cemented to the Bauernfeind prism. However, cementing is a well-known means of attachment for prisms (e.g. US Patent No. 5,847,866). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to cement the optical component and Bauernfeind prism as an inexpensive and secure means of attachment.

Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muchel (US Patent No. 4,691,997) in view of Otaki (US Patent No. 5,847,866).

Muchel discloses all the limitations of claim 1 as stated supra. Though Muchel does not expressly disclose the further limitations of claims 14 and 15, Otaki discloses a lens device (L2) disposed between the adaptation interface (between microscope and lens barrel 30) and the beam-deflecting device (M1), the lens device (L2) having a positive refractive power and the lens device (L2) being configured to convert a substantially collimated light beam into a converging light beam (fig. 2 and col. 4, line 44 – col. 5, line 5). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to provide such a lens since many objective systems provide collimated light and a converging light beam would be necessary to form an image and a compact system.

Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muchel (US Patent No. 4,691,997) in view of Sato (US Patent No. 5,519,531).

With respect to claims 16-18, Muchel discloses all the limitations of claim 1 as stated supra. Though Muchel does not expressly disclose the further limitations of claims 16-18, Sato



Art Unit: 2872

teaches an assembly is telescopic in a direction of an optical axis of a light beam and includes a first lens (112) having a negative refractive power and configured to substantially collimate a light beam, a second positive lens (113), and an operator interface (103) (fig. 8). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Muchel and Sato to allow the assembly of Muchel to be telescopic as taught by Sato to allow the operator to extend the usable range of the viewer's position making the microscope more ergonomic.

### *Response to Arguments*

Applicant's arguments filed 10/17/2006 have been fully considered but they are not persuasive. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the feature upon which applicant relies (i.e., a beam deflecting device configured to deflect both partial light beams away from the operator interface) has not been given a special definition in the instant specification and, therefore, has been given its broadest reasonable interpretation. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Applicant's specification states, "[t]he deflecting prism of the beam deflecting device is preferably arranged in such a way that the deflected light beam extends away from the microscope operator, i.e. toward the side of the microscope facing away from the operator." However, fig. 1 of the instant specification shows the second partial beam is, in fact, eventually directed toward operator interface. Therefore, any

Art Unit: 2872

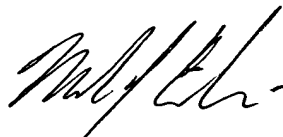
beam temporarily not directed towards the operator interface could be reasonably construed to mean a beam directed "away from" the operator interface.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Consilvio whose telephone number is (571) 272-2453. The examiner can normally be reached on Monday thru Friday, 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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